



SEQUENCE LISTING

<110> Doweyko, Arthur M.P.
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<120> Compositions and Methods Involving Nuclear Hormone Receptor Site II
<130> D0250 NP
<140> 10/621,807
<141> 2003-07-17
<150> 60/396,907
<151> 2002-07-18
<160> 21
<170> PatentIn version 3.3
<210> 1
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<213> Homo sapiens
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Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val
1 5 10 15

Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp
20 25 30

Ser Thr Trp Arg Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln
35 40 45

Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn
50 55 60

Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe
65 70 75 80

Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ser Ser Ala
85 90 95

Asn Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met
100 105 110

Thr Leu Pro Cys Met Tyr Asp Gln Cys Lys His Met Leu Tyr Val Ser
115 120 125

Ser Glu Leu His Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met
130 135 140

Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Asp Gly Leu Lys Ser
145 150 155 160

Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly
165 170 175

Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg
180 185 190

Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Met His Glu Val Val Glu
195 200 205

Asn Leu Leu Asn Tyr Cys Phe Gln Thr Phe Leu Asp Lys Thr Met Ser
210 215 220

Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro
225 230 235 240

Lys Tyr Ser Asn Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys
245 250 255

<210> 2
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<213> Homo sapiens

<400> 2

Gln Leu Ile Pro Pro Leu Ile Asn Leu Leu Met Ser Ile Glu Pro Asp
1 5 10 15

Val Ile Tyr Ala Gly His Asp Asn Thr Lys Pro Asp Thr Ser Ser Ser
20 25 30

Leu Leu Thr Ser Leu Asn Gln Leu Gly Glu Arg Gln Leu Leu Ser Val
35 40 45

Val Lys Trp Ser Lys Ser Leu Pro Gly Phe Arg Asn Leu His Ile Asp
50 55 60

Asp Gln Ile Thr Leu Ile Gln Tyr Ser Trp Met Ser Leu Met Val Phe
65 70 75 80

Gly Leu Gly Trp Arg Ser Tyr Lys His Val Ser Gly Gln Met Leu Tyr
85 90 95

Phe Ala Pro Asp Leu Ile Leu Asn Glu Gln Arg Met Lys Glu Ser Ser
100 105 110

Phe Tyr Ser Leu Cys Leu Thr Met Trp Gln Ile Pro Gln Glu Phe Val
115 120 125

Lys Leu Gln Val Ser Gln Glu Glu Phe Leu Cys Met Lys Val Leu Leu
130 135 140

Leu Leu Asn Thr Ile Pro Leu Glu Gly Leu Arg Ser Gln Thr Gln Phe
145 150 155 160

Glu Glu Met Arg Ser Ser Tyr Ile Arg Glu Leu Ile Lys Ala Ile Gly
165 170 175

Leu Arg Gln Lys Gly Val Val Ser Ser Ser Gln Arg Phe Tyr Gln Leu
180 185 190

Thr Lys Leu Leu Asp Asn Leu His Asp Leu Val Lys Gln Leu His Leu
195 200 205

Tyr Cys Leu Asn Thr Phe Ile Gln Ser Arg Ala Leu Ser Val Glu Phe
210 215 220

Pro Glu Met Met Ser Glu Val Ile Ala Ala Gln Leu Pro Lys Ile Leu
225 230 235 240

Ala Gly Met Val Lys Pro Leu Leu Phe His Lys
245 250

<210> 3
<211> 238
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<213> Homo sapiens

<400> 3

Ser Ala Asn Glu Asp Met Pro Val Glu Arg Ile Leu Glu Ala Glu Leu
1 5 10 15

Ala Val Glu Pro Lys Thr Glu Thr Tyr Val Glu Ala Asn Met Gly Leu
20 25 30

Asn Pro Ser Ser Pro Asn Asp Pro Val Thr Asn Ile Cys Gln Ala Ala
35 40 45

Asp Lys Gln Leu Phe Thr Leu Val Glu Trp Ala Lys Arg Ile Pro His
50 55 60

Phe Ser Glu Leu Pro Leu Asp Asp Gln Val Ile Leu Leu Arg Ala Gly
65 70 75 80

Trp Asn Glu Leu Leu Ile Ala Ser Phe Ser His Arg Ser Ile Ala Val
85 90 95

Lys Asp Gly Ile Leu Leu Ala Thr Gly Leu His Val His Arg Asn Ser
100 105 110

Ala His Ser Ala Gly Val Gly Ala Ile Phe Asp Arg Val Leu Thr Glu
115 120 125

Leu Val Ser Lys Met Arg Asp Met Gln Met Asp Lys Thr Glu Leu Gly
130 135 140

Cys Leu Arg Ala Ile Val Leu Phe Asn Pro Asp Ser Lys Gly Leu Ser
145 150 155 160

Asn Pro Ala Glu Val Glu Ala Leu Arg Glu Lys Val Tyr Ala Ser Leu
165 170 175

Glu Ala Tyr Cys Lys His Lys Tyr Pro Glu Gln Pro Gly Arg Phe Ala
180 185 190

Lys Leu Leu Leu Arg Leu Pro Ala Leu Arg Ser Ile Gly Leu Lys Cys
195 200 205

Leu Glu His Leu Phe Phe Lys Leu Ile Gly Asp Thr Pro Ile Asp
210 215 220

Thr Phe Leu Met Glu Met Leu Glu Ala Pro His Gln Met Thr
225 230 235

<210> 4
<211> 238
<212> PRT
<213> Homo sapiens

<400> 4

Leu Ser Pro Gln Leu Glu Glu Leu Ile Thr Lys Val Ser Lys Ala His
1 5 10 15

Gln Glu Thr Phe Pro Ser Leu Cys Gln Leu Gly Lys Tyr Thr Thr Asn
20 25 30

Ser Ser Ala Asp His Arg Val Gln Leu Asp Leu Gly Leu Trp Asp Lys
35 40 45

Phe Ser Glu Leu Ala Thr Lys Cys Ile Ile Lys Ile Val Glu Phe Ala
50 55 60

Lys Arg Leu Pro Gly Phe Thr Gly Leu Ser Ile Ala Asp Gln Ile Thr
65 70 75 80

Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Met Leu Arg Ile Cys Thr
85 90 95

Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp Gly Leu Thr
100 105 110

Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro Leu Thr Asp
115 120 125

Leu Val Phe Ala Phe Ala Gly Gln Leu Leu Pro Leu Glu Met Asp Asp
130 135 140

Thr Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys Gly Asp Arg
145 150 155 160

Met Asp Leu Glu Glu Pro Glu Lys Val Asp Lys Leu Gln Glu Pro Leu
165 170 175

Leu Glu Ala Leu Arg Leu Tyr Ala Arg Arg Arg Arg Pro Ser Gln Pro
180 185 190

Tyr Met Phe Pro Arg Met Leu Met Lys Ile Thr Asp Leu Arg Gly Ile

195

200

205

Ser Thr Lys Gly Ala Glu Arg Ala Ile Thr Leu Lys Met Glu Ile Pro
210 215 220

Gly Pro Met Pro Pro Leu Ile Arg Glu Met Leu Glu Asn Pro
225 230 235

<210> 5
<211> 251
<212> PRT
<213> Homo sapiens

<400> 5

Gln Leu Ile Pro Pro Leu Ile Asn Leu Leu Met Ser Ile Glu Pro Asp
1 5 10 15

Val Ile Tyr Ala Gly His Asp Asn Thr Lys Pro Asp Thr Ser Ser Ser
20 25 30

Leu Leu Thr Ser Leu Asn Gln Leu Gly Glu Arg Gln Leu Leu Ser Val
35 40 45

Val Lys Trp Ser Lys Ser Leu Pro Gly Phe Arg Asn Leu His Ile Asp
50 55 60

Asp Gln Ile Thr Leu Ile Gln Tyr Ser Trp Met Ser Leu Met Val Phe
65 70 75 80

Gly Leu Gly Trp Arg Ser Tyr Lys His Val Ser Gly Gln Met Leu Tyr
85 90 95

Phe Ala Pro Asp Leu Ile Leu Asn Glu Gln Arg Met Lys Glu Ser Ser
100 105 110

Phe Tyr Ser Leu Cys Leu Thr Met Trp Gln Ile Pro Gln Glu Phe Val
115 120 125

Lys Leu Gln Val Ser Gln Glu Glu Phe Leu Cys Met Lys Val Leu Leu
130 135 140

Leu Leu Asn Thr Ile Pro Leu Glu Gly Leu Arg Ser Gln Thr Gln Phe
145 150 155 160

Glu Glu Met Arg Ser Ser Tyr Ile Arg Glu Leu Ile Lys Ala Ile Gly
165 170 175

Leu Arg Gln Lys Gly Val Val Ser Ser Ser Gln Arg Phe Tyr Gln Leu
180 185 190

Thr Lys Leu Leu Asp Asn Leu His Asp Leu Val Lys Gln Leu His Leu
195 200 205

Tyr Cys Leu Asn Thr Phe Ile Gln Ser Arg Ala Leu Ser Val Glu Phe
210 215 220

Pro Glu Met Met Ser Glu Val Ile Ala Ala Gln Leu Pro Lys Ile Leu
225 230 235 240

Ala Gly Met Val Lys Pro Leu Leu Phe His Lys
245 250

<210> 6

<211> 250

<212> PRT

<213> Homo sapiens

<400> 6

Cys Gln Pro Ile Phe Leu Asn Val Leu Glu Ala Ile Glu Pro Gly Val
1 5 10 15

Val Cys Ala Gly His Asp Asn Asn Gln Pro Asp Ser Phe Ala Ala Leu
20 25 30

Leu Ser Ser Leu Asn Glu Leu Gly Glu Arg Gln Leu Val His Val Val
35 40 45

Lys Trp Ala Lys Ala Leu Pro Gly Phe Arg Asn Leu His Val Asp Asp
50 55 60

Gln Met Ala Val Ile Gln Tyr Ser Trp Met Gly Leu Met Val Phe Ala
65 70 75 80

Met Gly Trp Arg Ser Phe Thr Asn Val Asn Ser Arg Met Leu Tyr Phe
85 90 95

Ala Pro Asp Leu Val Phe Asn Glu Tyr Arg Met His Lys Ser Arg Met

100 105 110

Tyr Ser Gln Cys Val Arg Met Arg His Leu Ser Gln Glu Phe Gly Trp
115 120 125

Leu Gln Ile Thr Pro Gln Glu Phe Leu Cys Met Lys Ala Leu Leu Leu
130 135 140

Phe Ser Ile Ile Pro Val Asp Gly Leu Lys Asn Gln Lys Phe Phe Asp
145 150 155 160

Glu Leu Arg Met Asn Tyr Ile Lys Glu Leu Asp Arg Ile Ile Ala Cys
165 170 175

Lys Arg Lys Asn Pro Thr Ser Cys Ser Arg Arg Phe Tyr Gln Leu Thr
180 185 190

Lys Leu Leu Asp Ser Val Gln Pro Ile Ala Arg Glu Leu His Gln Phe
195 200 205

Thr Phe Asp Leu Leu Ile Lys Ser His Met Val Ser Val Asp Phe Pro
210 215 220

Glu Met Met Ala Glu Ile Ile Ser Val Gln Val Pro Lys Ile Leu Ser
225 230 235 240

Gly Lys Val Lys Pro Ile Tyr Phe His Thr
245 250

<210> 7
<211> 240
<212> PRT
<213> Homo sapiens

<400> 7

Ser Leu Ala Leu Ser Leu Thr Ala Asp Gln Met Val Ser Ala Leu Leu
1 5 10 15

Asp Ala Glu Pro Pro Ile Leu Tyr Ser Glu Tyr Asp Pro Thr Arg Pro
20 25 30

Phe Ser Glu Ala Ser Met Met Gly Leu Leu Thr Asn Leu Ala Asp Arg
35 40 45

Glu Leu Val His Met Ile Asn Trp Ala Lys Arg Val Pro Gly Phe Val
50 55 60

Asp Leu Thr Leu His Asp Gln Val His Leu Leu Glu Cys Ala Trp Leu
65 70 75 80

Glu Ile Leu Met Ile Gly Leu Val Trp Arg Ser Met Glu His Pro Gly
85 90 95

Lys Leu Leu Phe Ala Pro Asn Leu Leu Leu Asp Arg Asn Gln Gly Lys
100 105 110

Cys Val Glu Gly Met Val Glu Ile Phe Asp Met Leu Leu Ala Thr Ser
115 120 125

Ser Arg Phe Arg Met Met Asn Leu Gln Gly Glu Glu Phe Val Cys Leu
130 135 140

Lys Ser Ile Ile Leu Leu Asn Ser Gly Val Tyr Thr Phe Leu Ser Ser
145 150 155 160

Thr Leu Lys Ser Leu Glu Glu Lys Asp His Ile His Arg Val Leu Asp
165 170 175

Lys Ile Thr Asp Thr Leu Ile His Leu Met Ala Lys Ala Gly Leu Thr
180 185 190

Leu Gln Gln Gln His Glu Arg Leu Ala Gln Leu Leu Leu Ile Leu Ser
195 200 205

His Ile Arg His Met Ser Asn Lys Gly Met Glu His Leu Tyr Ser Met
210 215 220

Lys Cys Lys Asn Val Val Pro Leu Tyr Asp Leu Leu Leu Glu Met Leu
225 230 235 240

<210> 8
<211> 232
<212> PRT
<213> Homo sapiens

<400> 8

Asp Ala Leu Ser Pro Glu Gln Leu Val Leu Thr Leu Leu Glu Ala Glu

1 5 10 15

Pro Pro His Val Leu Ile Ser Arg Thr Glu Ala Ser Met Met Met Ser
20 25 30

Leu Thr Lys Leu Ala Asp Lys Glu Leu Val His Met Ile Ser Trp Ala
35 40 45

Lys Lys Ile Pro Gly Phe Val Glu Leu Ser Leu Phe Asp Gln Val Arg
50 55 60

Leu Leu Glu Ser Cys Trp Met Glu Val Leu Met Met Gly Leu Met Trp
65 70 75 80

Arg Ser Ile Asp His Pro Gly Lys Leu Ile Phe Ala Pro Asp Leu Val
85 90 95

Leu Asp Arg Asp Glu Gly Lys Cys Val Glu Gly Ile Leu Glu Ile Phe
100 105 110

Asp Met Leu Leu Ala Thr Thr Ser Arg Phe Arg Glu Leu Lys Leu Gln
115 120 125

His Lys Glu Tyr Leu Cys Val Lys Ala Met Ile Leu Leu Asn Ser Leu
130 135 140

Val Thr Ala Thr Gln Asp Ala Asp Ser Ser Arg Lys Leu Ala His Leu
145 150 155 160

Leu Asn Ala Val Thr Asp Ala Leu Val Trp Val Ile Ala Lys Ser Gly
165 170 175

Ile Ser Ser Gln Gln Ser Met Arg Leu Ala Asn Leu Leu Met Leu
180 185 190

Leu Ser His Val Arg His Ala Ser Asn Lys Gly Met Glu His Leu Leu
195 200 205

Asn Met Lys Cys Lys Asn Val Val Pro Val Tyr Asp Leu Leu Leu Glu
210 215 220

Met Leu Asn Ala His Val Leu Arg
225 230

<210> 9
<211> 250
<212> PRT
<213> Homo sapiens

<400> 9

Leu Arg Pro Lys Leu Ser Glu Glu Gln Gln Arg Ile Ile Ala Ile Leu
1 5 10 15

Leu Asp Ala His His Lys Thr Tyr Asp Pro Thr Tyr Ser Asp Phe Cys
20 25 30

Gln Phe Arg Pro Pro Val Arg Val Asn Asp Gly Gly Ser Val Thr
35 40 45

Leu Glu Leu Ser Gln Leu Ser Met Leu Pro His Leu Ala Asp Leu Val
50 55 60

Ser Tyr Ser Ile Gln Lys Val Ile Gly Phe Ala Lys Met Ile Pro Gly
65 70 75 80

Phe Arg Asp Leu Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser Ser
85 90 95

Ala Ile Glu Val Ile Met Leu Arg Ser Asn Glu Ser Phe Thr Met Asp
100 105 110

Asp Met Ser Trp Thr Cys Gly Asn Gln Asp Tyr Lys Tyr Arg Val Ser
115 120 125

Asp Val Thr Lys Ala Gly His Ser Leu Glu Leu Ile Glu Pro Leu Ile
130 135 140

Lys Phe Gln Val Gly Leu Lys Leu Asn Leu His Glu Glu Glu His
145 150 155 160

Val Leu Leu Met Ala Ile Cys Ile Val Ser Pro Asp Arg Pro Gly Val
165 170 175

Gln Asp Ala Ala Leu Ile Glu Ala Ile Gln Asp Arg Leu Ser Asn Thr
180 185 190

Leu Gln Thr Tyr Ile Arg Cys Arg His Pro Pro Pro Leu Leu Tyr Ala
195 200 205

Lys Met Ile Gln Lys Leu Ala Asp Leu Arg Ser Leu Asn Glu Glu His
210 215 220

Ser Lys Gln Tyr Arg Cys Leu Ser Phe Gln Pro Glu Cys Ser Met Lys
225 230 235 240

Leu Thr Pro Leu Val Leu Glu Val Phe Gly
245 250

<210> 10

<211> 271

<212> PRT

<213> Homo sapiens

<400> 10

Glu Ser Ala Asp Leu Arg Ala Leu Ala Lys His Leu Tyr Asp Ser Tyr
1 5 10 15

Ile Lys Ser Phe Pro Leu Thr Lys Ala Lys Ala Arg Ala Ile Leu Thr
20 25 30

Gly Lys Thr Thr Asp Lys Ser Pro Phe Val Ile Tyr Asp Met Asn Ser
35 40 45

Leu Met Met Gly Glu Asp Lys Ile Lys Phe Lys His Ile Thr Pro Leu
50 55 60

Gln Glu Gln Ser Lys Glu Val Ala Ile Arg Ile Phe Gln Gly Cys Gln
65 70 75 80

Phe Arg Ser Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Ser
85 90 95

Ile Pro Gly Phe Val Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu
100 105 110

Lys Tyr Gly Val His Glu Ile Ile Tyr Thr Met Leu Ala Ser Leu Met
115 120 125

Asn Lys Asp Gly Val Leu Ile Ser Glu Gly Gln Gly Phe Met Thr Arg
130 135 140

Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Gly Asp Phe Met Glu Pro
145 150 155 160

Lys Phe Glu Phe Ala Val Lys Phe Asn Ala Leu Glu Leu Asp Asp Ser
165 170 175

Asp Leu Ala Ile Phe Ile Ala Val Ile Ile Leu Ser Gly Asp Arg Pro
180 185 190

Gly Leu Leu Asn Val Lys Pro Ile Glu Asp Ile Gln Asp Asn Leu Leu
195 200 205

Gln Ala Leu Glu Leu Gln Leu Lys Leu Asn His Pro Glu Ser Ser Gln
210 215 220

Leu Phe Ala Lys Leu Leu Gln Lys Met Thr Asp Leu Arg Gln Ile Val
225 230 235 240

Thr Glu His Val Gln Leu Leu Gln Val Ile Lys Lys Thr Glu Thr Asp
245 250 255

Met Ser Leu His Pro Leu Leu Gln Glu Ile Tyr Lys Asp Leu Tyr
260 265 270

<210> 11

<211> 254

<212> PRT

<213> Homo sapiens

<400> 11

Ser Arg Ala Leu Thr Pro Ser Pro Val Met Val Leu Glu Asn Ile Glu
1 5 10 15

Pro Glu Ile Val Tyr Ala Gly Tyr Asp Ser Ser Lys Pro Asp Thr Ala
20 25 30

Glu Asn Leu Leu Ser Thr Leu Asn Arg Leu Ala Gly Lys Gln Met Ile
35 40 45

Gln Val Val Lys Trp Ala Lys Val Leu Pro Gly Phe Lys Asn Leu Pro
50 55 60

Leu Glu Asp Gln Ile Thr Leu Ile Gln Tyr Ser Trp Met Cys Leu Ser
65 70 75 80

Ser Phe Ala Leu Ser Trp Arg Ser Tyr Lys His Thr Asn Ser Gln Phe
85 90 95

Leu Tyr Phe Ala Pro Asp Leu Val Phe Asn Glu Glu Lys Met His Gln
100 105 110

Ser Ala Met Tyr Glu Leu Cys Gln Gly Met His Gln Ile Ser Leu Gln
115 120 125

Phe Val Arg Leu Gln Leu Thr Phe Glu Glu Tyr Thr Ile Met Lys Val
130 135 140

Leu Leu Leu Leu Ser Thr Ile Pro Lys Asp Gly Leu Lys Ser Gln Ala
145 150 155 160

Ala Phe Glu Glu Met Arg Thr Asn Tyr Ile Lys Glu Leu Arg Lys Met
165 170 175

Val Thr Lys Cys Pro Asn Asn Ser Gly Gln Ser Trp Gln Arg Phe Tyr
180 185 190

Gln Leu Thr Lys Leu Leu Asp Ser Met His Asp Leu Val Ser Asp Leu
195 200 205

Leu Glu Phe Cys Phe Tyr Thr Phe Arg Glu Ser His Ala Leu Lys Val
210 215 220

Glu Phe Pro Ala Met Leu Val Glu Ile Ile Ser Asp Gln Leu Pro Lys
225 230 235 240

Val Glu Ser Gly Asn Ala Lys Pro Leu Tyr Phe His Arg Lys
245 250

<210> 12
<211> 242
<212> PRT
<213> Homo sapiens

<400> 12

Lys Pro Glu Pro Thr Asp Glu Glu Trp Glu Leu Ile Lys Thr Val Thr
1 5 10 15

Glu Ala His Val Ala Thr Asn Ala Gln Gly Ser His Trp Lys Gln Lys
20 25 30

Arg Lys Phe Leu Pro Glu Asp Ile Gly Gln Ala Pro Lys Val Asp Leu
35 40 45

Glu Ala Phe Ser His Phe Thr Lys Ile Ile Thr Pro Ala Ile Thr Arg
50 55 60

Val Val Asp Phe Ala Lys Lys Leu Pro Met Phe Cys Glu Leu Pro Cys
65 70 75 80

Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys Cys Met Glu Ile Met Ser
85 90 95

Leu Arg Ala Ala Val Arg Tyr Asp Pro Glu Ser Glu Thr Leu Thr Leu
100 105 110

Asn Gly Glu Met Ala Val Thr Arg Gly Gln Leu Lys Asn Gly Gly Leu
115 120 125

Gly Val Val Ser Asp Ala Ile Phe Asp Leu Gly Met Ser Leu Ser Ser
130 135 140

Phe Asn Leu Asp Asp Thr Glu Val Ala Leu Leu Gln Ala Val Leu Leu
145 150 155 160

Met Ser Ser Asp Arg Pro Gly Leu Ala Cys Val Glu Arg Ile Glu Lys
165 170 175

Tyr Gln Asp Ser Phe Leu Leu Ala Phe Glu His Tyr Ile Asn Tyr Arg
180 185 190

Lys His His Val Thr His Phe Trp Pro Lys Leu Leu Met Lys Val Thr
195 200 205

Asp Leu Arg Met Ile Gly Ala Cys His Ala Ser Arg Phe Leu His Met
210 215 220

Lys Val Glu Cys Pro Thr Glu Leu Phe Pro Pro Leu Phe Leu Glu Val
225 230 235 240

Phe Glu

<210> 13
<211> 255
<212> PRT
<213> Homo sapiens

<400> 13

Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val
1 5 10 15

Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp
20 25 30

Ser Thr Trp Arg Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln
35 40 45

Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn
50 55 60

Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe
65 70 75 80

Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ser Ser Ala
85 90 95

Asn Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met
100 105 110

Thr Leu Pro Cys Met Tyr Asp Gln Cys Lys His Met Leu Tyr Val Ser
115 120 125

Ser Glu Leu His Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met
130 135 140

Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Asp Gly Leu Lys Ser
145 150 155 160

Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly
165 170 175

Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg

180	185	190
Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Met His Glu Val Val Glu		
195	200	205
Asn Leu Leu Asn Tyr Cys Phe Gln Thr Phe Leu Asp Lys Thr Met Ser		
210	215	220
Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro		
225	230	235
Lys Tyr Ser Asn Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys		
245	250	255
<210> 14		
<211> 777		
<212> PRT		
<213> Saimiri boliviensis		
<400> 14		
Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Lys Glu Glu Asn Pro Ser		
1	5	10
15		
Ser Val Leu Thr Gln Glu Arg Gly Asn Val Met Asp Phe Cys Lys Ile		
20	25	30
Leu Arg Gly Gly Ala Thr Leu Lys Val Ser Val Ser Ser Thr Ser Leu		
35	40	45
Ala Ala Ala Ser Gln Ser Asp Ser Lys Gln Gln Arg Leu Leu Val Asp		
50	55	60
Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys		
65	70	75
80		
Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys		
85	90	95
Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu		
100	105	110
Ser Ser Gly Glu Thr Asp Leu Gln Leu Leu Glu Glu Ser Ile Ala Asn		
115	120	125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser
130 135 140

Ser Ser Val Ser Ala Ala Pro Lys Glu Lys Glu Phe Pro Lys Thr His
145 150 155 160

Ser Asp Val Ser Ser Glu Gln Gln Asn Leu Lys Gly Gln Thr Gly Ser
165 170 175

Asn Gly Gly Asn Val Lys Leu Tyr Thr Ala Asp Gln Ser Thr Phe Asp
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr
195 200 205

Asn Gln Ser Pro Trp Lys Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu
210 215 220

Leu Ser Pro Leu Ala Gly Glu Glu Asp Ser Phe Leu Leu Glu Gly Asn
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Ser Asn Val Thr
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr
275 280 285

Pro Gly Val Ile Lys Gln Glu Lys Leu Ser Thr Val Tyr Cys Gln Ala
290 295 300

Ser Phe Pro Gly Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser
305 310 315 320

Ile His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Gln Asp Gln Lys Pro Ile Phe Asn
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser
500 505 510

Glu Asn Pro Ala Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu
530 535 540

Tyr Ala Gly Tyr Asp Ser Thr Val Pro Asp Ser Thr Trp Arg Ile Met
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln

580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ala Ser Ser Asn Leu Leu Cys Phe Ala
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu Leu
660 665 670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asn
755 760 765

Ile Lys Lys Leu Leu Phe His Gln Lys
770 775

<210> 15
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<400> 15

Val Ser Ala Ser Ser Pro Ser Leu Ala Ala Val Ser Gln Pro Asp Ser
1 5 10 15

Lys Gln Gln Arg Leu Ala Val Asp Phe Pro Lys Gly Ser Gly Ser Asn
20 25 30

Ala Gln Gln Pro Asp Leu Ser Lys Ala Val Ser Leu Ser Met Gly Leu
35 40 45

Tyr Met Gly Glu Thr Glu Thr Lys Val Met Gly Ser Asp Leu Gly Phe
50 55 60

Pro Gln Gln Gly Gln Ile Ser Leu Ser Ser Gly Glu Thr Asp Phe Arg
65 70 75 80

Leu Leu Glu Glu Ser Ile Ala Asn Leu Ser Arg Ser Thr Ser Val Pro
85 90 95

Glu Asn Pro Lys Ser Ser Ala Ser Ala Ala Gly Pro Ala Ala Pro Ala
100 105 110

Glu Lys Ala Phe Pro Lys Thr His Ser Asp Gly Ala Pro Glu Gln Pro
115 120 125

Asn Val Lys Gly Gln Thr Gly Thr Asn Gly Gly Asn Val Lys Leu Phe
130 135 140

Thr Thr Asp Gln Ser Thr Phe Asp Ile Trp Arg Lys Lys Leu Gln Asp
145 150 155 160

Leu Glu Leu Pro Ser Gly Ser Pro Gly Lys Glu Thr Ser Glu Ser Pro
165 170 175

Trp Ser Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu Leu Ser Pro Leu
180 185 190

Ala Gly Glu Glu Asp Pro Phe Leu Leu Glu Gly Ser Ser Thr Glu Asp
195 200 205

Cys Lys Pro Leu Val Leu Pro Asp Thr Lys Pro Lys Val Lys Asp Asn
210 215 220

Gly Glu Leu Ile Leu Pro Ser Pro Asn Ser Val Pro Leu Pro Gln Val
225 230 235 240

Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr Pro Gly Val Ile
245 250 255

Lys Gln Glu Lys Leu Gly Pro Ala Tyr Cys Gln Ala Ser Phe Ser Gly
260 265 270

Ala Asn Ile Ile Gly Gly Lys Met Ser Ala Ile Ser Val His Gly Val
275 280 285

Ser Thr Ser Gly Gly Gln Leu Tyr His Tyr Asp Met Asn Thr Ala Ala
290 295 300

Ser Leu Ser Lys Gln Gln Glu Gln Lys Pro Leu Phe Asn Val Ile Pro
305 310 315 320

Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln Gly Ser Gly
325 330 335

Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Ser Gly Arg Ser
340 345 350

Val Phe Ser Asn Gly Tyr Ser Ser Pro Gly Met Arg Pro Asp Val Ser
355 360 365

Ser Pro Pro Ser Ser Ser Ala Ala Thr Gly Pro Pro Pro Lys Leu
370 375 380

Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His Tyr Gly Val Leu
385 390 395 400

Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala Val Glu Gly Gln
405 410 415

His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile
420 425 430

Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys Cys Leu Gln Ala
435 440 445

Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Ile Lys Gly Ile

450 455 460

Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser Glu Asn Ser Ala
465 470 475 480

Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu
485 490 495

Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr
500 505 510

Asp Ser Ser Ile Pro Asp Ser Thr Trp Arg Ile Met Thr Ala Leu Asn
515 520 525

Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys Trp Ala Lys Ala
530 535 540

Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln Met Thr Leu Leu
545 550 555 560

Gln Tyr Ser Trp Met Phe Leu Met Val Phe Ala Leu Gly Trp Arg Ser
565 570 575

Tyr Arg Gln Ser Ser Ala Ser Leu Leu Cys Phe Ala Pro Asp Leu Val
580 585 590

Ile Asn Glu Gln Arg Met Ala Leu Pro Cys Met Tyr Asp Gln Cys Arg
595 600 605

His Met Leu Tyr Val Ser Ser Glu Leu Gln Arg Leu Gln Val Ser Tyr
610 615 620

Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu Ser Ser Val Pro
625 630 635 640

Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu Ile Arg Met Thr
645 650 655

Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg Glu Gly Asn Ser
660 665 670

Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser
675 680 685

Met His Asp Val Val Glu Asn Leu Leu Asn Tyr Cys Phe Gln Thr
690 695 700

<210> 16
<211> 771
<212> PRT
<213> Cavia porcellus

<400> 16

Met Asp Leu Lys Glu Ser Val Thr Ser Ser Lys Glu Val Pro Ser Ser
1 5 10 15

Val Leu Gly Ser Glu Arg Arg Asn Val Ile Asp Phe Tyr Lys Thr Val
20 25 30

Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser Leu Ala
35 40 45

Ala Ala Ala Gln Ser Asp Ser Lys Gln Arg Arg Leu Leu Val Asp Phe
50 55 60

Pro Lys Gly Ser Gly Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys Ala
65 70 75 80

Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys Val
85 90 95

Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu Pro
100 105 110

Ser Gly Glu Thr Asp Phe Arg Leu Leu Glu Glu Ser Ile Ala Asn Leu
115 120 125

Ser Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Asn Ser Ala Ser Ala
130 135 140

Val Ser Gly Thr Pro Thr Glu Glu Phe Pro Lys Thr Gln Ser Asp Leu
145 150 155 160

Ser Ser Glu Gln Glu Asn Leu Lys Ser Gln Ala Gly Thr Asn Gly Gly
165 170 175

Asn Val Lys Phe Pro Pro Asp Gln Ser Thr Phe Asp Ile Leu Lys Asp
180 185 190

Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Arg Ser Glu Ser Pro
195 200 205

Trp Arg Pro Asp Leu Leu Met Asp Glu Ser Cys Leu Leu Ser Pro Leu
210 215 220

Ala Gly Glu Asp Asp Pro Phe Leu Leu Glu Gly Asn Ser Asn Glu Asp
225 230 235 240

Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys Ile Lys Asp Asn
245 250 255

Gly Asp Gly Ile Leu Ser Ser Asn Ser Val Pro Gln Pro Gln Val
260 265 270

Lys Ile Gly Lys Glu Asp Phe Ile Glu Leu Cys Thr Pro Gly Val Ile
275 280 285

Lys Gln Glu Lys Leu Gly Pro Val Tyr Cys Gln Ala Ser Phe Ser Gly
290 295 300

Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser Val His Gly Val
305 310 315 320

Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met Asn Thr Ala Ser
325 330 335

Leu Ser Gln Gln Gln Asp Gln Lys Pro Ile Phe Asn Val Ile Pro Pro
340 345 350

Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln Gly Ser Gly Glu
355 360 365

Asp Asn Leu Thr Ser Leu Gly Thr Val Asn Phe Pro Gly Arg Ser Val
370 375 380

Phe Ser Asn Gly Tyr Ser Ser Pro Gly Leu Arg Pro Asp Val Ser Ser
385 390 395 400

Pro Pro Ser Ser Ser Thr Thr Gly Pro Pro Pro Lys Leu Cys

405 410 415

Leu Val Cys Ser Asp Glu Leu Ser Gly Cys His Tyr Gly Val Leu Thr
420 425 430

Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala Val Glu Gly Gln His
435 440 445

Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile Arg
450 455 460

Arg Glu Asn Cys Pro Ala Cys Arg Tyr Arg Lys Cys Leu Gln Ala Gly
465 470 475 480

Met Asn Leu Gln Ala Arg Lys Thr Lys Lys Ile Lys Gly Ile Gln
485 490 495

Gln Ala Thr Thr Gly Val Ser Gln Asn Thr Ser Glu Asn Pro Asn Lys
500 505 510

Thr Ile Val Pro Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu Val Ser
515 520 525

Leu Leu Glu Val Ile Glu Pro Glu Val Ile His Ser Gly Tyr Asp Ser
530 535 540

Thr Ser Pro Asp Ser Thr Trp Arg Ile Met Thr Thr Leu Asn Met Leu
545 550 555 560

Gly Gly Arg Gln Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro
565 570 575

Gly Phe Lys Asn Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr
580 585 590

Ser Trp Met Phe Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Lys
595 600 605

Gln Ser Asn Gly Ser Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn
610 615 620

Glu Gln Arg Met Ser Leu Pro Trp Met Tyr Asp Gln Cys Arg Tyr Met
625 630 635 640

Leu Tyr Val Ser Ser Glu Leu Lys Arg Leu Gln Val Ser Tyr Glu Glu
645 650 655

Tyr Leu Cys Met Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Glu
660 665 670

Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile
675 680 685

Lys Glu Leu Gly Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln
690 695 700

Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Leu His
705 710 715 720

Glu Ile Val Gly Asn Leu Leu Asn Ile Cys Phe Lys Thr Phe Leu Asp
725 730 735

Lys Thr Met Asn Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr
740 745 750

Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asp Ile Lys Lys Leu Leu Phe
755 760 765

His Gln Lys
770

<210> 17
<211> 777
<212> PRT
<213> Saguinus oedipus

<400> 17

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Lys Glu Glu Asn Pro Ser
1 5 10 15

Ser Val Leu Thr Gln Glu Arg Gly Asn Val Met Asp Phe Cys Lys Ile
20 25 30

Leu Arg Gly Gly Ala Thr Leu Lys Val Ser Val Ser Ser Thr Ser Leu
35 40 45

Ala Ala Ala Ser Gln Ser Asp Ser Lys Gln Gln Arg Leu Leu Val Asp
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu
100 105 110

Ser Ser Gly Glu Thr Asp Leu Gln Leu Leu Glu Glu Ser Ile Ala Asn
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser
130 135 140

Ser Ser Val Ser Ala Ala Pro Lys Glu Lys Glu Phe Pro Lys Thr His
145 150 155 160

Ser Asp Val Ser Ser Glu Gln Gln Asn Leu Lys Gly Gln Thr Gly Thr
165 170 175

Asn Gly Gly Asn Ala Lys Leu Cys Thr Ala Asp Gln Ser Thr Phe Asp
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr
195 200 205

Asn Gln Ser Pro Trp Arg Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu
210 215 220

Leu Ser Pro Leu Ala Gly Glu Glu Asp Ser Phe Leu Leu Glu Gly Asn
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Ser Asn Val Thr
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr

275 280 285

Pro Gly Val Ile Lys Gln Glu Lys Leu Ser Thr Val Tyr Cys Gln Ala
290 295 300

Ser Phe Pro Gly Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser
305 310 315 320

Ile His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser
500 505 510

Glu Asn Pro Ala Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu
530 535 540

Tyr Ala Gly Tyr Asp Ser Thr Val Pro Asp Ser Thr Trp Arg Ile Met
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln
580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ala Ser Ser Asn Leu Leu Cys Phe Ala
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu
660 665 670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asn
755 760 765

Ile Arg Lys Leu Leu Phe His Gln Lys
770 775

<210> 18

<211> 777

<212> PRT

<213> Aotus nancymaae

<400> 18

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Lys Glu Glu Asn Pro Ser
1 5 10 15

Ser Val Leu Thr Gln Glu Arg Gly Asn Val Met Asp Phe Ser Lys Ile
20 25 30

Leu Arg Gly Gly Ala Thr Leu Lys Val Ser Val Ser Ser Thr Ser Leu
35 40 45

Ala Ala Ala Ser Gln Ser Asp Ser Lys Gln Gln Arg Leu Leu Val Asp
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu
100 105 110

Ser Ser Gly Glu Thr Asp Leu Gln Leu Leu Glu Glu Ser Ile Ala Asn
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser
130 135 140

Ser Ser Val Ser Ala Ala Pro Lys Glu Lys Glu Phe Pro Lys Thr His

145 150 155 160
Ser Asp Val Ser Ser Glu Gln Gln Asn Leu Lys Gly Gln Thr Gly Thr
165 170 175

Asn Gly Gly Asn Val Lys Leu Tyr Thr Ala Asp Gln Ser Thr Phe Asp
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr
195 200 205

Asn Gln Ser Pro Trp Arg Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu
210 215 220

Leu Ser Pro Leu Ala Gly Glu Glu Asp Ser Phe Leu Leu Glu Gly Asn
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Ser Asn Val Thr
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr
275 280 285

Pro Gly Val Ile Lys Gln Glu Lys Leu Ser Thr Val Tyr Cys Gln Ala
290 295 300

Ser Phe Pro Gly Ala Asn Val Ile Gly Asn Lys Met Ser Ala Ile Ser
305 310 315 320

Ile His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser
500 505 510

Glu Asn Pro Ala Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu
530 535 540

Tyr Ala Gly Tyr Asp Ser Thr Val Pro Asp Ser Thr Trp Arg Ile Met
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln
580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ala Ser Ser Asn Leu Leu Cys Phe Ala
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu
660 665 670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asn
755 760 765

Ile Lys Lys Leu Leu Phe His Gln Lys
770 775

<210> 19
<211> 795
<212> PRT
<213> Rattus norvegicus

<400> 19

Met Asp Ser Lys Glu Ser Leu Ala Pro Pro Gly Arg Asp Glu Val Pro
1 5 10 15

Gly Ser Leu Leu Gly Gln Gly Arg Gly Ser Val Met Asp Phe Tyr Lys

20 25 30

Ser Leu Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser
35 40 45

Val Ala Ala Ala Ser Gln Ala Asp Ser Lys Gln Gln Arg Ile Leu Leu
50 55 60

Asp Phe Ser Lys Gly Ser Thr Ser Asn Val Gln Gln Arg Gln Gln Gln
65 70 75 80

Gln
85 90 95

Pro Gly Leu Ser Lys Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly
100 105 110

Glu Thr Glu Thr Lys Val Met Gly Asn Asp Leu Gly Tyr Pro Gln Gln
115 120 125

Gly Gln Leu Gly Leu Ser Ser Gly Glu Thr Asp Phe Arg Leu Leu Glu
130 135 140

Glu Ser Ile Ala Asn Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro
145 150 155 160

Lys Ser Ser Thr Ser Ala Thr Gly Cys Ala Thr Pro Thr Glu Lys Glu
165 170 175

Phe Pro Lys Thr His Ser Asp Ala Ser Ser Glu Gln Gln Asn Arg Lys
180 185 190

Ser Gln Thr Gly Thr Asn Gly Gly Ser Val Lys Leu Tyr Pro Thr Asp
195 200 205

Gln Ser Thr Phe Asp Leu Leu Lys Asp Leu Glu Phe Ser Ala Gly Ser
210 215 220

Pro Ser Lys Asp Thr Asn Glu Ser Pro Trp Arg Ser Asp Leu Leu Ile
225 230 235 240

Asp Glu Asn Leu Leu Ser Pro Leu Ala Gly Glu Asp Asp Pro Phe Leu
245 250 255

Leu Glu Gly Asn Thr Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp
260 265 270

Thr Lys Pro Lys Ile Lys Asp Thr Gly Asp Thr Ile Leu Ser Ser Pro
275 280 285

Ser Ser Val Ala Leu Pro Gln Val Lys Thr Glu Lys Asp Asp Phe Ile
290 295 300

Glu Leu Cys Thr Pro Gly Val Ile Lys Gln Glu Lys Leu Gly Pro Val
305 310 315 320

Tyr Cys Gln Ala Ser Phe Ser Gly Thr Asn Ile Ile Gly Asn Lys Met
325 330 335

Ser Ala Ile Ser Val His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr
340 345 350

His Tyr Asp Met Asn Thr Ala Ser Leu Ser Gln Gln Gln Asp Gln Lys
355 360 365

Pro Val Phe Asn Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp
370 375 380

Asn Arg Cys Gln Gly Ser Gly Glu Asp Ser Leu Thr Ser Leu Gly Ala
385 390 395 400

Leu Asn Phe Pro Gly Arg Ser Val Phe Ser Asn Gly Tyr Ser Ser Pro
405 410 415

Gly Met Arg Pro Asp Val Ser Ser Pro Pro Ser Ser Ser Ala Ala
420 425 430

Thr Gly Pro Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser
435 440 445

Gly Cys His Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe
450 455 460

Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn
465 470 475 480

Asp Cys Ile Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg
485 490 495

Tyr Arg Lys Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr
500 505 510

Lys Lys Lys Ile Lys Gly Ile Gln Gln Ala Thr Ala Gly Val Ser Gln
515 520 525

Asp Thr Ser Glu Asn Pro Asn Lys Thr Ile Val Pro Ala Ala Leu Pro
530 535 540

Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu
545 550 555 560

Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp Ser Ala Trp Arg
565 570 575

Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala
580 585 590

Val Lys Trp Ala Lys Ala Ile Leu Gly Leu Arg Asn Leu His Leu Asp
595 600 605

Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe
610 615 620

Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ser Ser Gly Asn Leu Leu Cys
625 630 635 640

Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Ser Leu Pro Cys
645 650 655

Met Tyr Asp Gln Cys Lys His Met Leu Phe Val Ser Ser Glu Leu Gln
660 665 670

Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu
675 680 685

Leu Leu Ser Ser Val Pro Lys Glu Gly Leu Lys Ser Gln Glu Leu Phe
690 695 700

Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val
705 710 715 720

Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu
725 730 735

Thr Lys Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Thr
740 745 750

Tyr Cys Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro
755 760 765

Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro Lys Tyr Ser Asn
770 775 780

Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys
785 790 795

<210> 20
<211> 783
<212> PRT
<213> Mus musculus

<400> 20

Met Asp Ser Lys Glu Ser Leu Ala Pro Pro Gly Arg Asp Glu Val Pro
1 5 10 15

Ser Ser Leu Leu Gly Arg Gly Arg Gly Ser Val Met Asp Leu Tyr Lys
20 25 30

Thr Leu Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser
35 40 45

Val Ala Ala Ala Ser Gln Ala Asp Ser Lys Gln Gln Arg Ile Leu Leu
50 55 60

Asp Phe Ser Lys Gly Ser Ala Ser Asn Ala Gln Gln Gln Gln Gln Gln
65 70 75 80

Gln Gln Pro Gln Pro Asp Leu Ser Lys Ala Val Ser Leu Ser Met Gly
85 90 95

Leu Tyr Met Gly Glu Thr Glu Thr Lys Val Met Gly Asn Asp Leu Gly
100 105 110

Tyr Pro Gln Gln Gly Gln Leu Gly Leu Ser Ser Gly Glu Thr Asp Phe
115 120 125

Arg Leu Leu Glu Glu Ser Ile Ala Asn Leu Asn Arg Ser Thr Ser Arg
130 135 140

Pro Glu Asn Pro Lys Ser Ser Thr Pro Ala Ala Gly Cys Ala Thr Pro
145 150 155 160

Thr Glu Lys Glu Phe Pro Gln Thr His Ser Asp Pro Ser Ser Glu Gln
165 170 175

Gln Asn Arg Lys Ser Gln Pro Gly Thr Asn Gly Gly Ser Val Lys Leu
180 185 190

Tyr Thr Thr Asp Gln Ser Thr Phe Asp Ile Leu Gln Asp Leu Glu Phe
195 200 205

Ser Ala Gly Ser Pro Gly Lys Glu Thr Asn Glu Ser Pro Trp Arg Ser
210 215 220

Asp Leu Leu Ile Asp Glu Asn Leu Leu Ser Pro Leu Ala Gly Glu Asp
225 230 235 240

Asp Pro Phe Leu Leu Glu Gly Asp Val Asn Glu Asp Cys Lys Pro Leu
245 250 255

Ile Leu Pro Asp Thr Lys Pro Lys Ile Gln Asp Thr Gly Asp Thr Ile
260 265 270

Leu Ser Ser Pro Ser Ser Val Ala Leu Pro Gln Val Lys Thr Glu Lys
275 280 285

Asp Asp Phe Ile Glu Leu Cys Thr Pro Gly Val Ile Lys Gln Glu Lys
290 295 300

Leu Gly Pro Val Tyr Cys Gln Ala Ser Phe Ser Gly Thr Asn Ile Ile
305 310 315 320

Gly Asn Lys Met Ser Ala Ile Ser Val His Gly Val Ser Thr Ser Gly
325 330 335

Gly Gln Met Tyr His Tyr Asp Met Asn Thr Ala Ser Leu Ser Gln Gln
340 345 350

Gln Asp Gln Lys Pro Val Phe Asn Val Ile Pro Pro Ile Pro Val Gly
355 360 365

Ser Glu Asn Trp Asn Arg Cys Gln Gly Ser Gly Glu Asp Asn Leu Thr
370 375 380

Ser Leu Gly Ala Met Asn Phe Ala Gly Arg Ser Val Phe Ser Asn Gly
385 390 395 400

Tyr Ser Ser Pro Gly Met Arg Pro Asp Val Ser Ser Pro Pro Ser Ser
405 410 415

Ser Ser Thr Ala Thr Gly Pro Pro Pro Lys Leu Cys Leu Val Cys Ser
420 425 430

Asp Glu Ala Ser Val Cys His Tyr Gly Val Leu Thr Cys Gly Ser Cys
435 440 445

Lys Val Phe Phe Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys
450 455 460

Ala Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile Arg Arg Lys Asn Cys
465 470 475 480

Pro Ala Cys Arg Tyr Arg Lys Cys Leu Gln Ala Gly Met Asn Leu Glu
485 490 495

Ala Arg Lys Thr Lys Lys Ile Lys Gly Ile Gln Gln Ala Thr Ala
500 505 510

Gly Val Ser Gln Asp Thr Ser Glu Asn Ala Asn Lys Thr Ile Val Pro
515 520 525

Ala Ala Leu Pro Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val
530 535 540

Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp
545 550 555 560

Ser Ala Trp Arg Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln
565 570 575

Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn
580 585 590

Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe
595 600 605

Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ala Ser Gly
610 615 620

Asn Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met
625 630 635 640

Thr Leu Pro Cys Met Tyr Asp Gln Cys Lys His Met Leu Phe Ile Ser
645 650 655

Thr Glu Leu Gln Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met
660 665 670

Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Glu Gly Leu Lys Ser
675 680 685

Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly
690 695 700

Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg
705 710 715 720

Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Met His Asp Val Val Glu
725 730 735

Asn Leu Leu Ser Tyr Cys Phe Gln Thr Phe Leu Asp Lys Ser Met Ser
740 745 750

Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro
755 760 765

Lys Tyr Ser Asn Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys
770 775 780

<211> 777
<212> PRT
<213> Homo sapiens

<400> 21

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Arg Glu Glu Asn Pro Ser
1 5 10 15

Ser Val Leu Ala Gln Glu Arg Gly Asp Val Met Asp Phe Tyr Lys Thr
20 25 30

Leu Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser Leu
35 40 45

Ala Val Ala Ser Gln Ser Asp Ser Lys Gln Arg Arg Leu Leu Val Asp
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu
100 105 110

Ser Ser Gly Glu Thr Asp Leu Lys Leu Leu Glu Glu Ser Ile Ala Asn
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser
130 135 140

Thr Ala Val Ser Ala Ala Pro Thr Glu Lys Glu Phe Pro Lys Thr His
145 150 155 160

Ser Asp Val Ser Ser Glu Gln Gln His Leu Lys Gly Gln Thr Gly Thr
165 170 175

Asn Gly Gly Asn Val Lys Leu Tyr Thr Thr Asp Gln Ser Thr Phe Asp
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr
195 200 205

Asn Glu Ser Pro Trp Arg Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu
210 215 220

Leu Ser Pro Leu Ala Gly Glu Asp Asp Ser Phe Leu Leu Glu Gly Asn
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Pro Ser Asn Val Thr
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr
275 280 285

Pro Gly Val Ile Lys Gln Glu Lys Leu Gly Thr Val Tyr Cys Gln Ala
290 295 300

Ser Phe Pro Gly Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser
305 310 315 320

Val His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser
500 505 510

Glu Asn Pro Gly Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu
530 535 540

Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp Ser Thr Trp Arg Ile Met
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln
580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ser Ser Ala Asn Leu Leu Cys Phe Ala
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu

660

665

670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro Lys Tyr Ser Asn Gly Asn
755 760 765

Ile Lys Lys Leu Leu Phe His Gln Lys
770 775